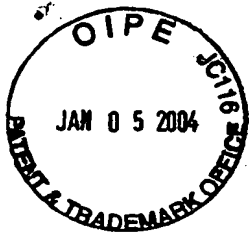


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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
ON APPEAL FROM THE EXAMINER TO THE BOARD
OF PATENT APPEALS AND INTERFERENCES

In re Application of: Prasad Y. Chebrolu
Serial No.: 09/406,381
Filing Date: September 27, 1999
Group Art Unit: 2155
Examiner: David Y. Eng
Title: SYSTEM AND METHOD FOR SELECTING A MODEM
FOR SERVICE

RECEIVED

JAN 12 2004

Technology Center 2100

Honorable Assistant Commissioner
for Patents
BOARD OF APPEALS AND INTERFERENCES
Washington, D.C. 20231

Dear Sir:

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" under 37 C.F.R. § 1.10 on the date indicated below and is addressed to: Commissioner for Patents, BOARD OF APPEALS AND INTERFERENCES, P.O. Box 1450, Alexandria, VA 22313-1450.

Willie Giles

Name

January 5, 2004

Date of Signature

Express Mail No. 323457052 US

APPEAL BRIEF

Appellant has appealed to this Board from the decision of the Examiner, contained in a Final Office Action mailed August 3, 2003 (the "Final Office Action"), finally rejecting Claims 1-36, and in an Office Action mailed June 4, 2003 (the "Second Office Action") to the extent the Examiner relied upon the Second Office Action in finally rejecting Claims 1-36. Appellant mailed a Notice of Appeal on November 5th, 2003. Appellant respectfully submits this Appeal Brief, in triplicate under 37 C.F.R. § 1.17(c).

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DAL01:764869.1

REAL PARTY IN INTEREST

The real party in interest for this Application under appeal is Cisco Systems, Inc., of San Jose, California.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to the Appellant, the undersigned Attorney for Appellant, or the Assignee that will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims 1-36 were rejected in the Final Action. Claims 1-36 are all presented for appeal and are set forth in Appendix A.

STATUS OF AMENDMENTS

Appellant filed no amendments after the Final Action.

SUMMARY OF INVENTION

Computers use modems to communicate and receive data over communication networks, such as telephone or cable networks. Specification, at p. 2, ll. 1-2. A provider of communication services will often use an access server that includes a pool of modems to provide communication services to multiple client computers. Id., at ll. 12-13. When a client computer requests communication service from the access server, the service provider allocates an available modem from the modem pool to provide the requested service. Id., at ll. 14-16. However, existing allocation methods are insufficiently effective in allocating modems to support high performance systems. Id., at ll. 15-17.

In general, the present invention provides a system and method for selecting a modem from a modem pool that improves performance of the communication system. Id., at p. 3, ll. 1-3. The system includes an access server that supports communication of digital data to provide client computers access to a data network. Id., at p. 5, ll. 1-3; p. 6, ll. In operation, a client computer contacts the access server through a communication network to request

service. The access server then allocates a modem to support communication between the client computer and a data network. *Id.*, at p. 5, ll. 29-30; p. 6, ll. 10-14.

More specifically, an allocation module of the access server selects an available modem for service based on a performance attribute of the modems. *Id.*, at p. 13, ll. 3-9. Upon receipt of a modem request from a client computer, the allocation module examines stored performance attributes to select an available modem for service. *Id.*, at p. 13, ll. 3-9. The performance attribute may be a call-success rate, an average data transfer rate, or any other information describing the performance of the modem. *Id.* A memory in the access server stores at least one performance attribute for each modem in the modem pool. *Id.*, at p. 9, ln. 17.

The allocation module may also receive a user identifier with the modem request. *Id.*, at p.10, ll. 16-19. If the allocation module does receive a user identifier, the allocation module identifies a user profile stored in memory that is associated with the user identifier. *Id.*, at p. 13, ll. 21-24. The user profile includes information describing modem services to be provided to a user associated with the user profile. *Id.*, at p. 13, ll. 24-26. The allocation module then selects a modem based on the user profile and the performance attributes of the modems. *Id.*, at p. 13, ln. 21 – p. 14, ln. 6.

In addition to selecting modems for service, the allocation module may remove modems from service based on their performance attributes. Specifically, the allocation module examines performance attributes stored in memory to determine whether any modems have performance attributes below a particular performance threshold. If so, the allocation module may remove those modems from service. *Id.*, at p. 14, ll. 7-11.

Additionally, a monitoring module of the access server monitors the performance of the modems during operation of the access server. *Id.*, at p. 11, ll. 1-3. The monitoring module can dynamically modify the performance attribute stored in the memory based on the operation of the modems. *Id.*, at p. 11, ll. 1-2. By monitoring the performance of the modems and modifying the performance attribute stored in the memory, the monitoring module can ensure that the performance attributes accurately reflect the performance of the modems. *Id.*, at p. 12, ll. 17-20.

ISSUES

I. Whether Claims 10 and 28 are unpatentable under 35 U.S.C. § 102(a) over U.S. Patent No. 5,546,379 issued to Thaweethai ("Thaweethai").

II. Whether Claims 1, 3-9, 12-19, 21-27, and 30-36 are unpatentable under 35 U.S.C. § 103(a) over Thaweethai.

III. Whether Claims 2, 11, 20, and 29 are unpatentable under 35 U.S.C. § 103(a) over Thaweethai, in view of U.S. Patent No. 5,828, 583 issued to Bush, et al. ("Bush").

GROUPING OF CLAIMS

Pursuant to 37 C.F.R. §1.192(c)(7), Appellant states that Claims 1-36 do not stand or fall together. Appellant requests that Claims 1-36 be grouped as follows for purposes of this appeal:

1. Issue I: With respect to this issue, Appellant submits that all Claims should stand or fall together.
2. Issue II: With respect to this issue, Appellant respectfully requests that, the Claims be grouped as follows:
Group IIA: Claims 1, 7-9, 16-19, 25-27, and 34-36
Group IIB: Claims 3-5, 12-14, 21-23, and 30-32.
Group IIC: Claims 6, 15, 24, and 33.
3. Issue III: With respect to this issue, Appellant submits that all Claims should stand or fall together.

ARGUMENT

I. Claims 10 and 28 are patentable over Thaweethai because Thaweethai fails to show, either expressly or inherently, every element of Appellant's claims.

The Examiner rejects Claims 10 and 28 under 35 U.S.C. § 102(a) as unpatentable over *Thaweethai*. To support a rejection of claims under 35 U.S.C. § 102(a) the Examiner must show that “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Col. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). Appellant’s Claim 10 recites:

10. *A method of selecting a modem for service, comprising:
storing a performance attribute for each of a plurality of modems;
receiving a modem request;
selecting a modem for service according to the modem’s performance attribute; and
coupling a remote modem and the selected modem.*

Appellant respectfully submits that *Thaweethai* fails to anticipate every element of Claim 10. In general, *Thaweethai* discloses a bandwidth-on-demand multiplexing system (or “BMS”) responsible for allocating resources on a network, including a plurality of modems in a modem pool. See, e.g., *Thaweethai*, at col. 1, ln. 64 – col. 2, ln. 6; col. 1 ll. 17-19. More specifically, the system of *Thaweethai* includes a modem pooling control function (“MPCF”) that maintains a database. The database stores information describing modem characteristics for modems in the system. See *Thaweethai*, at col. 16, ll. 6-8. A user attempting to dial out using the modem pool specifies a modem characteristic required for the communication session. See *Thaweethai*, at col. 18, ll. 49-51. As described below, the modem “characteristics” disclosed by *Thaweethai* do not represent “performance attributes” as recited by Claim 10.

As *Thaweethai* repeatedly makes clear, the disclosed modem characteristics are predetermined, fixed qualities of the modems. For example, *Thaweethai* indicates:

MPCF maintains a cross reference between the modem characteristics and the modem type. For each modem characteristics [sic], MPCF keeps a list of modem type names that satisfies [sic] the requirement.

Thaweethai, at col. 18, ll. 52-56. Additionally, *Thaweethai* notes:

The modem characteristics describe the required modem’s configuration. A cross reference between each modem characteristics [sic] and modem types

are maintained. For each set of modem characteristics, there is a set of modem types that satisfies such configuration.

Thaweethai, at col. 2, ll. 44-49.

Both the fact that the “MPCF keeps a list of modem type names that satisfies the requirement” and that *Thaweethai* can unconditionally state that “[f]or each set of modem characteristics[] there is a set of modem types that satisfies such configuration” clearly indicates that the modem characteristics disclosed by *Thaweethai* are predetermined, and not *performance* attributes of the modem.

Further support for the assertion that the modem characteristics of *Thaweethai* are predetermined can be found in an operating example in which *Thaweethai* states that:

the modem characteristics “V.42bis” is defined to contain the user defined tag “DCESpeed14400”. The N9635EP is the only modem type that *contains* “DCESpeed14400” *in its definition*. When the user or virtual interface specifies “V.42bis” as the modem characteristic when dialing out, MPCF then selects a dial-up port that is attached to an N9635EP.

Thaweethai, at col. 19, ll. 1-6 (emphasis added).

As this example makes clear, the modem characteristic is included *in the definition* of the modem type. Thus, the modem characteristic is predetermined and not based on performance. Because *Thaweethai* does not, therefore, disclose any performance attributes, *Thaweethai* does not disclose “storing a performance attribute for each of a plurality of modems” or “selecting a modem for service according to the modem’s performance attribute” as recited by Claim 10.

The Examiner attempts to address this omission by stating that “[a] modem would not perform well if it does not have the capability.” *Final Office Action*, pp. 2-3. However, this assertion inaccurately characterizes the system of *Thaweethai*. *Thaweethai* provides no indication that the modem would not “perform well”, as the Examiner asserts, at the time of modem selection for a particular call, even if the modem did not possess the required characteristics for that call. Moreover, the Examiner cites no language to support this description of the operation of the *Thaweethai* system.

The fact that a particular modem in the *Thaweethai* system does not have a capability for a particular call does not imply that the modem would consequently not be “perform[ing] well”, as the Examiner asserts, at the time a modem was selected for that call. The modems

of *Thaweethai* handle calls with different capability requirements. Although a modem might not be capable of satisfying the requirements of a particular call, the modem may very well be performing in an acceptable fashion for calls with other capability requirements. Thus, in the system of *Thaweethai*, a modem's "capabilities" have no bearing on the modem's performance when a modem selection is made.

Thus, Appellant respectfully notes that the Examiner's conclusion is erroneous and that the statement that "[the] modem would not perform well" does not adequately address this omission of *Thaweethai*. For at least this reason, *Thaweethai* does not anticipate "storing a performance attribute for each of a plurality of modems" or "selecting a modem for service according to the modem's performance attribute" as recited by Claim 10.

Additionally, the system of *Thaweethai* does not store information of any type "for each of a plurality of modems" or "select[] a modem for service", as recited in Claim 10. As noted above, *Thaweethai* states that:

MPCF maintains a cross reference between the modem characteristics and the *modem type*. For each modem characteristics [sic], MPCF keeps a list of *modem type* names that satisfies [sic] the requirement.

Thaweethai, at col. 18, ll. 52-56 (emphasis added). *Thaweethai* also states that:

A cross reference between each modem characteristics [sic] and *modem types* are maintained. For each set of modem characteristics, there is a set of *modem types* that satisfies such configuration. Not all *modem types* will satisfy all modem characteristics. MPCF will select one of the *modem types* in that subset for dialing out.

Thaweethai, at col. 2, ll. 44-51 (emphasis added).

Thus, the system of *Thaweethai* stores modem characteristics for *modem types* and selects a *modem type* based on the characteristics of the modem type. The system of *Thaweethai* does not "stor[e] a performance attribute for each of a plurality of modems" or "select[] a modem for service according to the modem's performance attribute" as recited by Claim 10. As a result, *Thaweethai* does not anticipate these elements for this additional reason.

Consequently, *Thaweethai* does not anticipate every element of Claim 10, and Claim 10 is allowable for at least these reasons. Appellant respectfully requests that the Board reverse the rejection of Claim 10. Additionally, although Claim 28 differs in scope from

Claim 10, Claim 28 includes elements that, for reasons substantially similar to those discussed above with respect to Claim 10, are absent from *Thaweethai*. Thus, Claim 28 is also allowable for at least this reason. Appellant respectfully requests that the Board also reverse the rejection of Claim 28.

II. Claims 1, 3-9, 12-19, 21-27, and 30-36 are patentable under 35 U.S.C. § 103(a) over Thaweethai because Thaweethai fails to disclose, teach, or suggest every element of Claims 1, 3-9, 12-19, 21-27, and 30-36.

Group IIA – Claims 1, 7-9, 16-19, 25-27, and 34-36

The Examiner rejects Claims 1, 7-9, 16-19, 25-27, and 34-36 under 35 U.S.C. § 103(a) as unpatentable over *Thaweethai*. To establish a *prima facie* case of obviousness, the Examiner must show that a proposed modification of a reference teaches or suggests all elements of the rejected claims. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991). Appellant's Claim 1 recites:

1. *An access server, comprising:
a plurality of modems;
a memory operable to store a performance attribute for each modem;
an allocation module coupled to the memory and operable to receive a modem request and to select a modem for service according to the modem's performance attribute; and
a telecommunication interface coupled to the allocation module and operable to couple a remote modem to the selected modem.*

The Examiner alleges that *Thaweethai* discloses every element of Claim 1, except that it fails to “characterize the apparatus as a server.” The Examiner asserts that this would be an obvious modification. *Second Office Action*, pp. 2-3. While Appellant respectfully traverses the assertion that this would be an obvious modification, the Appellant submits that the cited reference, even with the proposed modification, fails to disclose, teach, or suggest all elements of Claim 1. For reasons substantially similar to those discussed above with respect to Claim 10, *Thaweethai* fails to disclose, teach, or suggest “a memory operable to store a

performance attribute for each modem” and “an allocation module coupled to the memory and operable to receive a modem request and to select a modem for service according to the modem’s performance attribute” as recited by Claim 1. Claim 1 is thus allowable for at least this reason.

Although of differing scope from Claim 1, Claim 19 includes elements that, for reasons substantially similar to those discussed above for Claim 1, are also not disclosed, taught, or suggested by *Thaweethai*. Claims 7-9 and 25-27 depend from allowable Claims 1 and 19, respectively. Additionally, Claims 16-18 and 34-36 depend from Claims 10 and 28, respectively, which have been shown above to be allowable in *Section I*. For at least these reasons, Appellant respectfully requests that the Board reverse the rejection of Claims 1, 7-9, 16-19, 25-27, and 34-36.

Group IIB - Claims 3-5, 12-14, 21-23, and 30-32

The Examiner also rejects Claims 3-5, 12-14, 21-23, and 30-32 under 35 U.S.C. § 103(a) as unpatentable over *Thaweethai*. As an example of this group, Appellant’s Claim 3 recites:

3. *The access server of Claim 1, wherein:
the memory is further operable to store a plurality of user profiles; and
the allocation module is further operable to receive a user identifier
associated with the modem request, to identify a user profile associated with
the user identifier in the memory, and to select a modem for service according
to the modem’s performance attribute and the user profile.*

Appellant respectfully submits that these claims are patentably distinct from the claims of Group IIA, based on the inclusion of elements directed to, for example in Claim 3, a memory operable “to store a plurality of user profiles” and an allocation module operable both “to receive a user identifier” and “to identify a user profile associated with the user identifier in the memory.”

As noted above, to establish a prima facie case of obviousness, the Examiner must show that a proposed modification teaches or suggests all elements of the rejected claims. *In re Vaeck* at 488. In the Final Office Action, the Examiner relied upon the Examiner’s

rejection of these claims in the Second Office Action to again reject the claims. *Final Office Action*, p. 2. In the Second Office Action, the Examiner rejected Claim 3 by relying on his rejection of Claim 1 and additionally stating: “With respect to claims 3-5, 12-14, 21-23, and 30-32, see claim 7 in *Thaweethai*.” *Second Office Action*, p. 3. Claim 7 of *Thaweethai* recites:

A modem pooling control method for automatically selecting a modem from among a number of modems according to a plurality of modem requirements defined by a user, the method comprising steps of:

storing, in a database, a plurality of modem capability parameters associated with a plurality of different modems with a plurality of command sets;

automatically selecting, on the basis of a stored plurality of modem capability parameters, a selected modem from the plurality of modems, such that the selected modem meets the plurality of modem requirements defined by the user; and

interconnecting the selected modem with a remote modem.

Appellant submits that the cited reference fails to disclose, teach, or suggest all elements of Claim 3. Although the Examiner, in rejecting Claim 3, failed to explain his reasoning, Appellant respectfully submits that this language of *Thaweethai* does not disclose, teach, or suggest all elements of Claim 3. For example, Claim 3 includes the aspect of “storing . . . a plurality of modem capability parameters.” The only “storing” disclosed in Claim 7 of *Thaweethai* involves storing “a plurality of modem capability parameters associated with a plurality of different modems with a plurality of command sets[.]” The Examiner has, over the Appellant’s traversal above, interpreted the “modem capability parameters” of *Thaweethai* as disclosing the “performance attributes” of Claim 1 from which Claim 3 depends. The “modem capability parameters” of *Thaweethai* thus can not also represent “a plurality of user profiles” in light of the fact that both “performance attributes” and “a plurality of user profiles” are recited by Claim 3. Thus, *Thaweethai* does not disclose a memory “operable to store a plurality of user profiles” as recited by Claim 3.

Furthermore, Claim 7 of *Thaweethai* does not disclose a “user identifier.” The Examiner fails to explain how *Thaweethai* discloses this element, and Appellant respectfully submits that *Thaweethai* does not, in fact, disclose a “user identifier.” Because *Thaweethai* does not disclose a “user identifier”, *Thaweethai* can not disclose a processor operable to

“receive a user identifier associated with the modem request” or a processor operable to “identify a user profile associated with the user identifier in the memory” as recited by Appellant’s Claim 3. Therefore, Appellant has shown that the cited reference fails to disclose, teach, or suggest all elements of Appellant’s Claim 3. Claim 3 is thus allowable for at least these reasons.

Although of differing scope from Claim 3, Claims 12, 21, and 30 include elements that, for reasons substantially similar to those discussed for Claim 3, are also not disclosed, taught, or suggested by *Thaweethai*. Additionally, Claims 4-5, 13-14, 22-23, and 31-32 depend from Claims 3, 12, 21, and 30, respectively, all of which have been shown to be allowable. Therefore, Appellant respectfully requests that the Board reverse the rejection of Claims 3-5, 12-14, 21-23, and 30-32.

Group IIC - Claims 6, 15, 24, and 33

The Examiner also rejects Claims 6, 15, 24, and 33 under 35 U.S.C. § 103(a) as unpatentable over *Thaweethai*. As an example of this group, Appellant’s Claim 6 recites:

6. *The access server of Claim 1, wherein the allocation module is further operable to remove a modem from service according to the modem’s performance attribute.*

Appellant respectfully submits that these claims are patentably distinct from the claims of Group IIA and IIB, based on the inclusion of elements directed to, for example in Claim 6, an allocation module operable to “remove a modem from service according to the modem’s performance attribute.”

As noted above, to establish a prima facie case of obviousness, the Examiner must show that a proposed modification of a reference proposed modification teaches or suggests all elements of the rejected claims. *In re Vaeck* at 488. In the Final Office Action, the Examiner relied upon the Examiner’s rejection of these claims from the Second Office Action to again reject the claims. *Final Office Action*, p. 2. In the Second Office Action, the Examiner stated that “the types of attributes being monitored and the type of modems used is a matter of design choice.” *Second Office Action*, p. 3. Appellant respectfully submits that this statement fails to explain how *Thaweethai* discloses, teaches, or suggests an allocation

module operable “to remove a modem from service according to the modem’s performance attribute.” Moreover, Appellant submits that *Thaweethai* does not disclose this element, as *Thaweethai* does not disclose any manner of “remov[ing] a modem from service[.]” Additionally, as discussed above, *Thaweethai* does not disclose, teach, or suggest every element of Claim 1 from which Claim 6 depends.

Therefore, Appellant has shown that *Thaweethai* does not disclose, teach, or suggest all elements of Claim 6. Although of differing scope from Claim 6, Claims 15, 24, and 33 disclose elements that, for reasons substantially similar to those discussed with respect to Claim 6, are not disclosed, taught, or suggested by *Thaweethai*. For at least these reasons, Appellant respectfully requests that the Board reverse the rejection of Claims 6, 15, 24, and 33.

III. Claims 2, 11, 20, and 29 are patentable over Thaweethai, in view of Bush, because these references fail to teach or suggest all elements of Appellant’s claims and because the combination of these references is inappropriate.

To establish a *prima facie* case of obviousness using a combination of references, the Examiner must satisfy three criteria. First, there must be suggestion or motivation in the prior art to combine the references. Second, there must be a reasonable expectation of success. Third, the combination must teach or suggest all elements of the rejected claims. *In re Vaack* at 488. Appellant’s Claim 2 recites:

2. The access server of Claim 1, further comprising a monitoring module coupled to the modems and the memory, the monitoring module operable to monitor the selected modem’s performance and to modify the performance attribute for the selected modem according to the modem’s performance.

Appellant submits that the cited reference fails to disclose, teach, or suggest all elements of Claim 2. In the Final Office Action, the Examiner relied primarily upon the Examiner’s rejection of these claims from the Second Office Action to again reject these claims. *Final Office Action*, p. 2. In the Second Office Action, the Examiner asserted that:

[u]pdating performance attributes of an apparatus being monitored is well known in the art. Bush teaches updating of performance attributes of a disk drive being monitored. See lines 17-24 and lines 40-51 of column 38 and claims 17 and 21 in Bush. From the teaching of Bush, it would have been obvious to a person of ordinary skill in the art to update the performance attributes of Thaweethai such the stored attributes reflect the latest data.

Second Office Action, p. 3.

To this explanation, the Examiner, in the *Final Office Action*, added only that:

In regard to the rejection based on Thaweethai and Bush, Applicants disagree with the Examiner that monitoring performance attributes is obvious. It should be noted that the rejection is not made based on the Examiner's opinion. Rather, the rejection is based on Thaweethai in view of Bush. Bush clearly teaches monitoring and updating performance attributes (capable if perform well and not capable if does not perform well) of a device (disk drive or modem). It would have been obvious to a person of ordinary skill in the art to monitor and update the capability information or performance attributes in Thaweethai as taught by Bush such that the modem of Thaweethai can be selected based on more accurate information. Note that the purpose of update is to obtain latest information. Obviously, Thaweethai requires latest information in order to make a better selection.

Final Office Action, p. 3.

Appellant has shown above that independent Claim 1, from which Claim 2 depends, is patentable over *Thaweethai*. *Thaweethai* additionally fails to disclose, teach, or suggest a monitoring module coupled to the modems and the memory, the monitoring module operable to monitor the selected modem's performance and to modify the performance attribute for the selected modem according to the modem's performance" as recited by Claim 2.

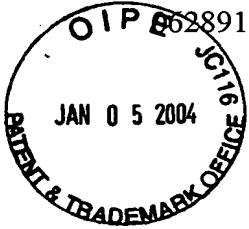
Appellant respectfully submits that *Bush* also fails to disclose, teach, or suggest the elements of Claim 2 not disclosed by *Thaweethai*. *Bush* describes a system and method for predicting failure of storage devices. *Bush*, Abstract. *Bush* does not discuss "storing a performance attribute for each of a plurality of modems" or "selecting a modem for service according to the modem's performance attribute[.]" Thus, *Bush* fails to add any of the previously discussed elements from independent Claim 1 that are not disclosed, taught, or suggested by *Thaweethai*. Thus, to whatever extent the Examiner can accurately describe *Bush* as "teach[ing] updating of performance attributes of a disk drive being monitored", the

combination of *Thaweethai* and *Bush* still fails to disclose, teach, or suggest all elements of Claim 2.

In addition, Appellant respectfully submits that the combination proposed by the Examiner is improper because the prior art fails to teach, suggest, or motivate the proposed combination of references. *Thaweethai* discloses a method of selecting a modem type based on capabilities of the modem type. See, e.g., *Thaweethai*, col. 2, ll. 43-51. By contrast, *Bush* discloses monitoring storage devices to predict device failure and does not disclose any type of selection of the storage devices. See, e.g., *Bush*, Abstract. The references focus on different areas of technology and clearly do not teach, suggest, or motivate combination. Thus, the proposed combination of the references is improper.

Moreover, the Examiner has not identified in the prior art any such teaching, suggestion, or motivation to combine the references. “When an obviousness determination is based on multiple prior art references, there must be a showing of some teaching, suggestion, or reason to combine the references.” *Winner Intern. Royalty Corp. v. Wang*, 202 F.3d 1340, 1348 (Fed. Cir. 2000). The Examiner fails to identify any such motivation for combination in either *Thaweethai* or *Bush*, stating only that “[f]rom the teaching of *Bush*, it would have been obvious to a person of ordinary skill in the art to update the performance attributes of *Thaweethai* such the that the stored attributes reflect the latest data” and “[o]bviously, *Thaweethai* requires latest information in order to make a better selection.” *Second Office Action*, p. 3; *Final Office Action*, p. 3. However, these conclusory statements fail to demonstrate any teaching, suggestion, or motivation for the proposed combinations.

Therefore, Appellant has shown that the cited references fail to teach or suggest all elements of Appellant’s Claim 2. Although of differing scope from Claim 2, Claims 11, 20, and 29 include elements that, for reasons substantially similar to those discussed with respect to Claim 2, are not disclosed, taught, or suggested by the cited references. Additionally, Appellant has shown that there is no teaching, suggestion, or motivation in the prior art to combine the cited references. For at least these reasons, Appellant respectfully requests that the Board reverse the rejection of Claims 2, 11, 20, and 29.

**CONCLUSION**

Appellant has demonstrated that the present invention, as claimed in Claims 1-36, is patentably distinct from the cited art. Accordingly, Appellant respectfully requests that the Board reverse the final rejection of the Examiner and instruct the Examiner to issue a Notice of Allowance of Claims 1-36.

Appellant submits this Appeal Brief in triplicate and encloses a check in the amount of \$330.00 to cover the fee. The Commissioner is hereby authorized to charge any extra fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS, L.L.P.
Attorneys for Appellant

Kurt M. Pankratz
Registration No. 46,977

2001 Ross Avenue
Dallas, TX 75201-2980
Phone: 214.953.6584
Fax: 214.661.4584

Date:

Jan 5, 2004

CORRESPONDENCE ADDRESS:

Customer Number:

05073

APPENDIX A - CLAIMS PRESENTED ON APPEAL

1. (Original) An access server, comprising:
a plurality of modems;
a memory operable to store a performance attribute for each modem;
an allocation module coupled to the memory and operable to receive a modem request and to select a modem for service according to the modem's performance attribute; and
a telecommunications interface coupled to the allocation module and operable to couple a remote modem to the selected modem.
2. (Original) The access server of Claim 1, further comprising a monitoring module coupled to the modems and the memory, the monitoring module operable to monitor the selected modem's performance and to modify the performance attribute for the selected modem according to the modem's performance.
3. (Original) The access server of Claim 1, wherein:
the memory is further operable to store a plurality of user profiles; and
the allocation module is further operable to receive a user identifier associated with the modem request, to identify a user profile associated with the user identifier in the memory, and to select a modem for service according to the modem's performance attribute and the user profile.
4. (Original) The access server of Claim 3, wherein:
each user profile indicates a subset of modems; and
the allocation module is further operable to identify a subset of modems according to the user profile and to select a modem for service from the identified subset according to the modem's performance attribute.

5. (Original) The access server of Claim 3, wherein:
each user profile indicates a criterion related to a performance attribute; and
the allocation module is further operable to identify a criterion according to the user profile and to select a modem for service according to the criterion and the modem's performance attribute.

6. (Original) The access server of Claim 1, wherein the allocation module is further operable to remove a modem from service according to the modem's performance attribute.

7. (Original) The access server of Claim 1, wherein:
the performance attribute is a call success rate; and
the allocation module selects a modem for service by identifying an available modem associated with the highest call success rate.

8. (Original) The access server of Claim 1, wherein:
the performance attribute is an average data transfer rate; and
the allocation module selects a modem for service by identifying an available modem associated with the highest average data transfer rate.

9. (Original) The access server of Claim 1, wherein the modems are digital subscriber line (DSL) modems.

10. (Original) A method of selecting a modem for service, comprising:
storing a performance attribute for each of a plurality of modems;
receiving a modem request;
selecting a modem for service according to the modem's performance attribute; and
coupling a remote modem and the selected modem.
11. (Original) The method of Claim 10, further comprising:
monitoring the selected modem's performance; and
modifying the performance attribute for the selected modem according to the
modem's performance.
12. (Original) The method of Claim 10, further comprising:
storing a plurality of user profiles;
identifying a user profile associated with the modem request; and
selecting a modem for service according to the modem's performance attribute and
the user profile.
13. (Original) The method of Claim 12, further comprising:
identifying a subset of modems associated with the user profile; and
selecting a modem for service from the identified subset according to the modem's
performance attribute.
14. (Original) The method of Claim 12, further comprising:
identifying a criterion according to the user profile, the criterion related to the
performance attributes of the modems; and
selecting a modem for service according to the criterion and the modem's
performance attribute.
15. (Original) The method of Claim 10, further comprising removing a modem
from service according to the modem's performance attribute.

16. (Original) The method of Claim 10, wherein:
the performance attribute is a call success rate; and
selecting a modem for service according to the modem's performance attribute
comprises identifying an available modem associated with the highest call success rate.

17. (Original) The method of Claim 10, wherein:
the performance attribute is an average data transfer rate; and
selecting a modem for service according to the modem's performance attribute
comprises identifying an available modem associated with the highest average data transfer
rate.

18. (Original) The method Claim 10, wherein the modems are digital subscriber
line (DSL) modems.

19. (Original) An apparatus for selecting a modem for service, comprising:
a memory operable to store a performance attribute for a plurality of modems; and
an allocation module coupled to the memory and operable to receive a modem request, to select a modem for service according to a performance attribute stored in the memory, and to communicate a modem identifier associated with the selected modem.

20. (Original) The apparatus of Claim 19, further comprising a monitoring module operable to monitor the selected modem's performance and to modify the performance attribute for the selected modem according to the modem's performance.

21. (Original) The apparatus of Claim 19, wherein:
the memory is further operable to store one or more user profiles; and
the allocation module is further operable to identify a user profile associated with the modem request and to select a modem for service according to the user profile.

22. (Original) The apparatus of Claim 21, wherein the allocation module is further operable to identify a subset of modems according to the user profile and to select a modem for service from the identified subset according to the modem's performance attribute.

23. (Original) The apparatus of Claim 21, wherein the allocation module is further operable to identify a criterion according to the user profile and to select a modem for service according to the criterion and the modem's performance attribute.

24. (Original) The apparatus of Claim 19, wherein the allocation module is further operable to remove a modem from service according to the modem's performance attribute.

25. (Original) The apparatus of Claim 19, wherein:
the performance attribute is a call success rate; and
the allocation module selects a modem for service by identifying an available modem associated with the highest call success rate.

26. (Original) The apparatus of Claim 19, wherein:
the performance attribute is an average data transfer rate; and
the allocation module selects a modem for service by identifying an available modem associated with the highest average data transfer rate.

27. (Original) The apparatus of Claim 19, wherein the modems are digital subscriber line (DSL) modems.

28. (Original) Modem selection software embodied in a computer-readable medium and operable to perform the following steps:

- storing a performance attribute for each of a plurality of modems;
- receiving a modem request;
- selecting a modem for service according to the modem's performance attribute; and
- coupling a remote modem and the selected modem.

29. (Original) The modem selection software of Claim 28, further operable to perform the following steps:

- monitoring the selected modem's performance; and
- modifying the performance attribute for the selected modem according to the modem's performance.

30. (Original) The modem selection software of Claim 28, further operable to perform the following steps:

- storing a plurality of user profiles;
- identifying a user profile associated with the modem request; and
- selecting a modem for service according to the modem's performance attribute and the user profile.

31. (Original) The modem selection software of Claim 30, further operable to perform the following steps:

- identifying a subset of modems associated with the user profile; and
- selecting a modem for service from the identified subset according to the modem's performance attribute.

32. (Original) The modem selection software of Claim 30, further operable to perform the following steps:

identifying a criterion according to the user profile, the criterion related to the performance attributes of the modems; and

selecting a modem for service according to the criterion and the modem's performance attribute.

33. (Original) The modem selection software of Claim 28, further operable to perform the step of removing a modem from service according to the modem's performance attribute.

34. (Original) The modem selection software of Claim 28, wherein:
the performance attribute is a call success rate; and
selecting a modem for service according to the modem's performance attribute comprises identifying an available modem associated with the highest call success rate.

35. (Original) The modem selection software of Claim 28, wherein:
the performance attribute is an average data transfer rate; and
selecting a modem for service according to the modem's performance attribute comprises identifying an available modem associated with the highest average data transfer rate.

36. (Original) The modem selection software of Claim 28, wherein the modems are digital subscriber line (DSL) modems.